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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/822,462

04/12/2004

Joseph J. Kubler

14364US21

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02/09/2006

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CHICAGO, IL 60661

EXAMINER

NGUYEN, BRIAN D

ART UNIT

PAPER NUMBER

2661

DATE MAILED: 02/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/822,462

Applicant(s)

KUBLER ET AL.

Examiner

Brian D. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 21 November 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 22-52 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 22-26, 29-34, 36-41, 44-49 and 52 is/are rejected.
- 7) ☒ Claim(s) 27, 28, 35, 42, 43, 50 and 51 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 October 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 11/9/05.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Specification*

1. The applicant is requested to update the status of all the applications mentioned in the specification. For example, Application No. 09/037,535, mentioned in page 1 of the specification, now US Pat No. 6,389,010.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 22-26, 29-34, 36-41, 44-49, and 52 are rejected under 35 U.S.C. 103(a) as being unpatentable over McCaslin et al (5,631,900) in view of Matsumoto (5,812,944) and Kline et al (6,157,653).

Regarding claim 22, McCaslin discloses a circuit (figure 1) for processing data representative of voice signals, the circuit having two signal paths comprising: in a first signal path (14), a digital to analog converter (16) having an output, the digital to analog converter converting the first voice data to a first analog representation of the first voice signal, and, in a second signal path (44), an analog to digital converter (34) having an input, the analog to digital converter for converting a second analog representation of a second voice signal to second voice data; and signal processing circuitry (38, 40) for removing from the second voice signal represented by the second voice data, a portion of the first voice signal representative of the first

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voice data (see col. 3, line 66-col. 4, line 41). McCaslin does not specifically disclose a queue for storing voice data representative of the first voice signal. However, this feature is well known in the art. Matsumoto discloses a buffer (21) for storing first voice data representative of a first voice signal (see figure 1). Matsumoto does not explicitly disclose the buffer is a queue.

However, Kline discloses a buffer (402) is a queue (see enqueue and dequeue processes in figure 4 and col. 6, lines 11-22). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use a queue buffer as taught by Matsumoto and Kline in the system of McCaslin in order to store voice data before processing.

Regarding claim 23, McCaslin discloses the signal processing circuitry comprises a subtractor (38 in figure 1 and col. 4, line 15).

Regarding claim 24, McCaslin discloses the signal processing circuit delays the voice representative of the portion of the first voice data (see 190 in figure 6 and col. 11, lines 1-3).

Regarding claim 25, McCaslin discloses the portion removed comprises undesirable components of the first voice signal present in the second voice signal (the removed component is the echo, see col. 4, lines 25-41).

Regarding claim 26, McCaslin does not explicitly disclose at least one processor processing received voice packets into the first voice data and processing the second voice data into transmit voice packets. However, this feature is well known in the art. Kline discloses a processor (212 in figure 2) that processes received voice packets into the first voice data and processing the second voice data into transmit voice packets (see figure 2 and col. 5, line 33-col. 6, line 10). Therefore, it would have been obvious to a person of ordinary skill in the art at the

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time the invention was made to use a processor to process voice packets as taught by Kline in the system of McCaslin in order to process voice signal for transport over a packet network.

Regarding claim 29, McCaslin discloses the circuit of further comprising: at least one signal coupling circuit for coupling voice signals from a two wire telephone network connection to the input of the analog to digital converter, and the at least one signal coupling circuit for coupling voice signals from the output of the digital to analog converter to the two wire telephone network connection (see A/D 34 and D/A 16 converters in figure 1).

Regarding claims 30-34 and 36, claims 30-34 and 36 are merely the method counterpart of circuit claims 22-26 and 29 and include similar language. Therefore, they are subject to the same rejection.

Regarding claims 37-41 and 44, claims 37-41 and 44 are merely the machine-readable medium counterpart of circuit claims 22-26 and 29 and include similar language. Therefore, they are subject to the same rejection.

Regarding claims 45-49 and 52, claims 45-49 and 52 are merely the system counterpart of circuit claims 22-26 and 29 and include similar language. Therefore, they are subject to the same rejection.

***Allowable Subject Matter***

4. Claims 27-28, 35, 42-43, and 50-51 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Response to Arguments***

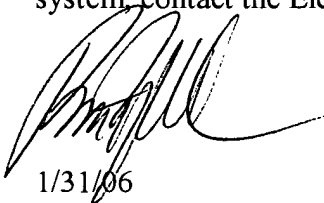
5. Applicant's arguments with respect to claims 22-26, 29-34, 36-41, 44-49, and 52 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian D. Nguyen whose telephone number is (571) 272-3084. The examiner can normally be reached on 7:30-6:00 Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen can be reached on (571) 272-3126. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



1/31/06

**BRIAN NGUYEN  
PRIMARY EXAMINER**